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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,046	01/19/2001	Jamal Ramdani	JG00069	9615

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EXAMINER

MUNSON, GENE M

ART UNIT	PAPER NUMBER
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2811

DATE MAILED: 04/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

766,046

Applicant(s)

J. RAMDANI ET AL

Examiner

G. MUNSON

Group Art Unit

2811

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☒ Responsive to communication(s) filed on 4 February 2002
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-42 is/are pending in the application.  
Of the above claim(s) 17-29 is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-15, 30-42 is/are rejected.
- ☒ Claim(s) 16 is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
  - ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2
- ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 2811

Claims 17-29 are withdrawn from consideration as being for a non-elected invention. The election was made with traverse in the response, paper No. 5, filed 4 February 2002. The traverse (page 2) does not state that unpatentability of the group I invention would necessarily imply unpatentability of the group II invention to overcome the restriction. Contrary to the traverse, process differences from the claimed process of the group II invention are taken to be material differences prior to examination on the merits. Contrary to the traverse, more than two subclasses have been searched, but a search for the group I invention is not co-extensive with a search for the group II invention. Moreover, a reference relevant to the group I invention may not be relevant to the group II invention, and vice-versa. Separate examination would be required for the group II invention. The requirement for restriction has been reconsidered in view of the traverse, is restated and is made *final*.

On page 18, line 14, "54" appears misprinted.

The unnumbered claim, between claims 4 and 5, is objected to under 37 CFR 1.75 and is not further considered.

Claims 7-15 and 31-42 are rejected under 35 U.S.C. 112, second paragraph. In claims 7, 9, 11, 13 and 31, the dependence is wrong.

Note that the process terminology (claims 2, 3, 13, 30 etc) is considered only in terms of a necessary *resultant structure* from the process. The process itself is not at issue for a device claim. The device claims are *not* limited to the recited process. See MPEP 2113; *In re Brown*, 173 USPQ

Art Unit: 2811

685 (CCPA 1972); *In re Fitzgerald* 205 USPQ (CCPA 1980); *In re Marosi*, 218 USPQ 289, 292-293 (CCPA 1983); *In re Thorpe*, 227 USPQ 964 (CAFC 1985).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 30, 31, 33 and 37-40 are rejected under 35 U.S.C. 102 as unpatentable as shown by Yu et al. See Figure 5, column 3, lines 34-37, 40-42, with "substrate" 10, "buffer" silicon nitride layer 16, and "second" or "template" BaSiN<sub>2</sub> layer (claims 34, 40) at surface 18 which forms an interface 14. The "monocrystalline nitride material" layers (claim 31) read on single crystal nitride layers taught by Yu et al (Column 3, lines 40-42).

Claims 1-6, 30-35 and 37-41 are rejected under 35 U.S.C. 102 as unpatentable as shown by Kadota. See Figure 1 with "amorphous" layer 3, "template" layer 4 and "monocrystalline material" layers 5-9.

Art Unit: 2811

Claims 1-6, 30-35 and 37-41 are rejected under 35 U.S.C. 102 as unpatentable as shown by Thornton et al. See Figure 6, column 2, lines 63-65, with "amorphous" layer 320, "template" layer 314.

The other references are cited of interest in showing use of a "buffer" layer between monocrystalline substrate and a monocrystalline layer.

Claim 16 is objected to as dependent upon a rejected claim but would be allowable over the art of record if put in completed form as an independent claim including all limitations of claims 1, 3, 16. The art of record does not show and would not have suggested this claim taken as a whole.

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04/23/02



**GENE M. MUNSON  
EXAMINER  
GROUP ART UNIT 253**